DOCUMENT RESUME

ED 123 253 TM 005 312

AUTHOR Willsey, Alan D.
TITLE Attitudes Towards School in an Open School.
PUB DATE 16 Apr 75
NOTE 39p.; Paper presented at the Spring Conference of the New England Educational Research Organization (Provincetown, Massachusetts, April 30-May 3, 1976)

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage
DESCRIPTORS *Attitude Tests; Comparative Analysis; Elementary School Students; *Intermediate Grades; *Open Education; Questionnaires; *School Attitudes; Student Attitudes; Test Results; *Traditional Schools
IDENTIFIERS *Student Attitude Questionnaire

ABSTRACT

Data indicates a greater positive attitude toward school held by children in an open program compared to children in a traditional program, thus supporting the idea that an open environment may lead to more positive attitudes toward school. This research is drawn from an extensive evaluation of open education being conducted under the leadership of the State University College at Cortland. Specifically, data is available from the administration of the Student Attitude Questionnaire (SAQ) to children in a sample of traditional classrooms and children in classrooms assessed as an open environment through use of the classroom observation techniques. The SAQ contains 40 items (although comparable data from both groups is available for only 36 items) distributed on four dimensions: School Climate, Peer, Teacher and School Subjects. Children in the open classrooms showed significantly greater positive responses on the overall SAQ score, School Climate, and Teacher. Open children were also more positive on the Peer Dimension and the Subject Dimension but this difference was not significant. The Traditional school children were significantly more positive on only two of the 36 SAQ items compared. (RC)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED123253

ATTITUDES TOWARDS SCHOOL IN AN OPEN SCHOOL

Alan D. Willsey
Assistant Professor
Research and Evaluation Specialist
Center for Research and Demonstration
Campus Laboratory School
State University College
Cortland, New York

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

April 16, 1975

Paper for Presentation at the Spring Conference
New England Educational Research Organization

Provincetown, Massachusetts

April 30 - May 3, 1975

Reporting Session #2 8:45 A.M. May 1, 1975
Student Attitudes Towards Curriculum

TM005 312

Problem:

Empirical research on open education has been inadequate, both in quantity and in quality. The open approach to an educational environment will not be in a position to firmly establish itself as a legitimate alternative to the status quo of American education unless it can be empirically established to have a beneficial impact on children. Attitudes toward school are an important aspect of the growth and development of elementary children. As one effort to shed empirical light on open education it would be appropriate to examine the impact open education might have on attitudes toward school.

Some research has been reported that is concerned with attitudes children have towards school, but very little has been conducted on attitudes towards school in an open environment. (Ball, 1971 and Strickland, 1970) In one of the few studies in the area of attitudes and open education, Tuckman reported that students in open schools had more positive attitudes toward school in the five grades that he examined, grades 1 through 5. (1972) The paucity of research in this area suggests that more needs to be known about attitudes towards school and the open environment. The present research report is drawn from an extensive evaluation of open education project being conducted under the leadership of the State University College at Cortland in cooperation with several schools. Data for this report is part of the larger study. Specifically, data is available from the administration of an attitude assessment instrument to an open classroom group enrolled in a college-controlled laboratory school and to a sample of classrooms in a nearby school system.

The open group has been assessed as an open environment through use of the classroom observation instrumentation developed by Walberg and Thomas. (1971) The traditional classrooms in the study were described by their teachers as good traditional classrooms, but they did profess to have at least an interest in open education as a possible educational

alternative.

The open classroom group was from a school that was at the end of its second year as an open school. The open approach adopted by the school consists of dividing the day into half-hour blocks with subject requirements in the basic skill areas and a number of elective subjects that the students can choose to schedule. There may be as many as 10 subject matter choices available to a child in addition to the two basic areas of math and language arts. The scheduling system and the large amount of choice are salient features of this particular open approach.

Procedures:

The Student Attitude Questionnaire, SAQ was administered to all intermediate children in the open school, N = 130, in May of the second year of its open approach and a comparison group of children enrolled in a self-contained, traditional educational program. The traditional group contained 112 children in fourth, fifth, and sixth grades of several schools in the immediate area.

The instrument contains 40 items. Four of the items deal with specific subjects that are not part of the educational program for the traditional school sample. This report focuses on 36 items for which comparison data is available.

The 36 items are distributed on four dimensions: (1) School Climate was concerned with the children's views of the total school environment. Items asked such questions as whether children liked to come to school, whether they wished to be somewhere else, and whether they liked the principal. The primary referent for the attitude as expressed in these items is "school". The dimension includes 15 items, the most of any dimension.

The second dimension is entitled the Peer Dimension and is concerned with children's attitudes toward other children. Questions such as the degree of cooperativeness with other children and the extent other children

bothered them are included. The dimension includes 7 items. A third dimension is entitled the Teacher Dimension and is concerned with the children's attitudes toward teachers. The dimension includes items such as Do your teachers tell you when you are doing good? Seven items are on this dimension.

The fourth dimension is entitled the Comparative Subjects Dimension and consisted of asking children the question: Do you like to go to _____? about each of seven subjects.

Each item calls for a yes or no response. In some questions, a yes response is considered positive and in other questions, a no response is considered positive. For purposes of analysis, the responses are all converted to positive - negative responses.

Results and Discussion:

The overall results show that the children in an open environment gave 80.01 per cent positive responses to the questionnaire items while the children from the traditional environment gave 64.60 per cent positive responses. This difference of 15.6 per cent was significant at the .01 level. The children in the open school environment in this study were considerably more positive in their attitudes towards school than were children in a more traditional environment. These results are displayed in Table 1.

Table 1

Total Questionnaire

Overall Responses

	Positive		Negative		
	N	%	N	%	Chi Square = 7.49
Open	3727	80.01	926	19.99	Significant at .01 Level
Traditional	2592	64.60	1425	35.40	

The first dimension from the questionnaire is the School Climate Dimension. Table 2 shows the overall results for the fifteen items on

this dimension. The positive responses of the open school children continue. On this dimension, the open school children were 23.8 per cent more positive than the children in the traditional school environment. This difference was significant at the .001 level.

Table 2

Dimension I - School Climate

Overall Response

	Positive		Negative		
	N	%	N	%	Chi Square 17.77
Open	1620	82.44	345	17.66	Significant at .001
Traditional	975	58.65	690	41.45	

The School Climate Dimension includes a total of fifteen items. Tables 3 through 17 report the responses on each item and the value of the chi square computed between the open group and the traditional sample. A difference at the .001 level was found on five items, a difference at the .01 level was found on two items, a difference at the .05 level was found on two items, and six items showed no significant differences.

Five items on this dimension were concerned with the "things" that children do in school. The largest difference in this area was found on the item asking children if they can do things at school that they like to do. The results are presented in Table 3.

Table 3

Dimension I - School Climate

Item 1 - Can you do things at school that you like to do?

	Positive		Negative		
	N	%	N	%	
Open	115	88.46	15	11.54	Chi Square 81.33
Traditional	36	32.14	76	57.96	Significant at .001 Level

Over 56 per cent fewer traditional school children reported that they could do things that they liked to do. This item does not speak to the nature of things, but it does suggest that children in an open environment are much more satisfied with their ability to do things in school that they liked to do. This could refer to the ability to choose and select a significant portion of their daily and weekly schedule of activities. For the intermediate children in the open group, the referent probably includes the scheduling process.

The second item refers more directly to the child's attitudes toward the nature of things in school. This item is reported in Table 4, and children were asked if there were lots of interesting things to do in school. The traditional sample was significantly lower than the open group, but not as much lower as item 1. The children in the traditional group reported a positive response approximately twenty per cent less than the children in the open group.

Table 4

Dimension I - School Climate

Item 2 - Are there lots of interesting things for you to do at school?

	Positive		Negative		
	N	%	N	%	
Open	124	95.36	6	4.61	Chi Square = 8.55
Traditional	84	75.00	28	25.00	Significant at .01 Level

Viewing items one and two together suggest that the traditional school is a place where they have interesting things, but the children do not get a chance to do the things that they like to do; while the open school is seen as a place where even more interesting things are available and a far greater opportunity exists for children to do the things they like to do.

The next three items asked the children to evaluate the things that they do in school in terms of whether or not they are too easy, too hard, or whether they have enough time. This difference between the traditional sample and open group was significant at the .05 level. This suggests that the traditonal group children find their school to be easier than children in an open school. Many people view an open approach negatively and suggest that it does not provide sufficient academic rigor, or at least what many people perceive as academic rigor. The children report otherwise. The traditional school children feel that their school is easier than the open school children. This result is mediated slightly by the response to item 4 as shown in Table 6.

Table 5

Dimension I - School Climate

Item 3 - Are the things that you do in school too easy?

	Positive		Negative		
	N	%	N	%	
Open	97	74.61	33	25.38	Chi Square = 4.00
Traditional	70	62.50	42	37.50	Significant at .05 Level

Table 5

Dimension I - School Climate

Item 4 - Are the things that you do in school too hard?

	Positive		Negative		
	N	%	N	%	
Open	111	86.71	17	13.28	Chi Square = .15
Traditional	99	88.40	13	11.60	Not Signficant

No significant differences were found between the traditional school and the open school when the children were asked if things in school were too hard. Just over thirteen per cent of the open group said that things were too hard, and just under twelve per cent of the public school group said that things were too hard. If these results were consistent to those found on item 3, the open school group would have had significantly more yeses in answer to this item than the public school. The difference was in that direction, but it was not significant.

If hard-easy is a bipolar continuum, then the results of items 3 and 4 conflict with one supporting the critics that suggest that open education is not academically rigorous, and one supporting the advocates that suggest that open education is as academically rigorous as any school program. If easy-hard is not considered bipolar by children, then the results may be consistent, but still mysterious.

The last item, concerned with the things that children do in school, asked if children had enough time to finish the things that they started. The response to this item appear in Table 7.

Table 7

Dimension I - School Climate

Item 5 - Do you have enough time to finish the things that you start?

	Positive		Negative		
	N	%	N	%	Chi Square = 2.78
Open	90	69.23	40	30.76	Not Significant
Traditional	66	58.90	46	41.10	

No significant differences were found on this item. The results on this item have relevance to the scheduling system in this particular open approach. The system of half hour blocks suggest that some children may just get something started and then have to leave it. These results show that the children feel that they have sufficient time.

This time, however, may not simply be the half hour block. Children may well be satisfied with doing very little, or they may be comfortable finishing something up over a period of time in several half-hour blocks.

Another item related to the work that children do in school asked children if they learned a lot in school. The results for this item are presented in Table 8. The comparison to the traditional sample shows no significant difference. The traditional school children reported that they learned a lot 91 per cent of the time.

Table 8

Dimension I - School Climate

Item 6 - Do you think you learn a lot at school?

	Positive		Negative		
	N	%	N	%	Chi Square = .17
Open	121	92.36	10	7.63	Not Significant
Traditional	102	91.10	10	8.90	

In response to an item concerning rules in the school, 57 per cent more of the traditional children reported that they had too many rules than did the open school children. The results for this item appear in Table 9.

Table 9

Dimension I - School Climate

Item 7 - Does your school have too many rules?

	Positive		Negative		
	N	%	N	%	
Open	115	89.14	14	10.85	Chi Square = 84.35
Traditional	35	31.20	77	68.80	significant at .001 level

It is obvious than an open environment has considerably fewer "rules" than does the more traditional environment. The issue or question of legitimacy is also a factor. The item asked the children if there were "too many" rules. If a child answered yes to this item, he or she is suggesting that the school has more rules than it should. This suggests further that that child does not accept the rules that are in existence, at least in terms of quantity. While it can be argued that the perception of children is not the only criteria for establishing and determining the legitimacy of rules, it should be considered as a far more important criteria than it often is. It is difficult for adults to obey rules that they do not accept as legitimate, yet most school programs seem to expect children to obey rules whether or not the child considers the rule legitimate. The open school provides an environment that is significantly higher in terms of the children's acceptance of the number of rules. What remains unanswered is whether this is a function of a very few rules, or more consideration for the children's opinion of what rules are legitimate.

Another item on this dimension that relates to authority and rule making concerns the principal. The item asked children if they liked the principal. The results are reported in Table 10.

Table 10

Dimension I - School Climate

Item 8 - Do you like the principal?

	Positive		Negative		
	N	%	N	%	Chi Square = 9.26
Open	105	79.54	27	20.45	Significant at .0 Level
Traditional	66	61.70	41	38.30	

Eighteen per cent more of the children in the open environment "liked" their principal than in the traditional environment. This difference was significant at the .01 level.

Three items were concerned with attitudes of children in terms of whether or not they wanted to be in school. Item 9 asked if most of the time the children wished they were somewhere else. The results of this item are in Table 11.

Table 11
Dimension I - School Climate

Item 9 - Most of the time when you are in school do you wish you were somewhere else?

	Positive		Negative		
	N	%	N	%	Chi Square = 78.28
Open	87	65.41	46	34.58	Significant at .001 Level
Traditional	11	9.82	101	90.17	

A very significant difference was found between the open group and the traditional group. A considerably higher number of children in a traditional school wish they were somewhere else. It is almost incredible to think that over 90 per cent of the traditional school children wished that they were not in school most of the time. The psychological impact of being someplace where you don't want to be would seem to have strong implications for education.

Item 10 sought information relevant to this issue as well, when it asked children if they liked to come to school. The results on this item are presented in Table 12.

Table 12

Dimension I - School Climate

Item 10 - Do you like to come to school?

	Positive		Negative		
	N	%	N	%	chi square = 50.61
Open	106	79.10	28	20.88	Significant at .001 Level
Traditional	37	33.00	75	67.00	

Again, the open environment is viewed significantly more positive than the more traditional environment. The open group was 46 per cent more positive about coming to school than the traditional sample. It is obvious that a high proportion of children in a traditional environment do not want to go to school, and when they are in school, they wish they were someplace else. These negative feelings are significantly less in an open school. A learning environment should be one to which children want to come and want to learn. A handicap exists if initially the children do not want to come to that environment. An open

school approach serves to overcome that handicap and provides more positive environment for learning to begin.

A third item is also relevant to this discussion. Item 11 asked children if they liked to stay home from school. The results appear in Table 13.

Table 13

Dimension I - School Climate

Item 10 - Do you like to stay home from school?

	Positive		Negative		
	N	%	N	%	Chi Square = .01
Open	92	70.22	39	29.77	Not Significant
Traditional	76	67.90	36	32.10	

The results are not consistent with the results from the two previous items. The open children report that they do not like to stay home from school. This is consistent with previous results showing an open environment as a school where children like to come, prefer to be when they are there, and do not like to stay home from. However, on this item, the traditional group is not significantly different. They also do not want to stay home from school. This raises the obvious question of where children in a tradition school really want to be. Their responses on these three items show that they do not want to go to school, that when they are in school they wished they were someplace else, but they don't want to stay home from school either.

The final four items on this dimension deal with attitudes toward school that are more at the feeling level. Item 12 appears in Table 14 and asked children if they were sad at school.

Table 14

Dimension I - School Climate

Item 12 - Do you feel sad when you are at school?

	Positive		Negative		
	N	%	N	%	Chi Square = .80
Open	128	96.96	4	3.03	Not significant
Traditional	105	93.80	7	6.20	

The children in all three groups were not sad very often and no significant differences existed between the public school and the Campus School. (Not feeling sad was considered a positive response.)

Item 13 appears in Table 15 and asked children if school made them mad.

Table 15

Dimension I - School Climate

Item 13- Does School make you mad?

	Positive		Negative		
	N	%	N	%	Chi Square = 66.15
Open	15	11.45	116	88.54	Significant at .001
Traditional	68	61.30	43	38.70	

The results on this item are hard to understand. A significantly greater number of open children reported that school made them mad.

(A yes response was considered negative.) In the traditional school only 39 per cent said that school made them mad.

One possible explanation of these results may lie in the contention often made by open educators that the traditional public school suppresses the feelings in children. Children are not allowed or even encouraged to express themselves at the feeling level. An open environment, however, is considerably different in that it allows and encourages the expression of feelings. Thus a child in a traditional environment who does not want to come to school, and wishes he or she were someplace else, may not be mad. A child in an open school may be much more willing to express a mad feeling. Being mad would be recognized as a legitimate and normal expression of feelings.

Another item concerned with feelings asked children if they felt scared in school. The results of item 4 appear in Table 16.

Table 16

Dimension I - School Climate

Item 14 - Do you feelscared at school?

	Positive		Negative		
	N	%	N	%	Chi Square = 2.04
Open	129	99.20	1	.71	Not significant
Traditional	107	95.50	5	4.50	

The number of children who feel scared at school is relatively low and no significant difference was found. (Not being scared was considered positive.)

The final item on this dimension asked children if other people at school really cared enough about them. This item is reported in Table 17.

Table 17

Dimension I - School Climate

Item 15 - Do other people at school really care enough about you?

	Positive		Negative		
	N	%	N	%	Chi Square = 18.00
Open	82	63.07	48	36.92	Significant at .001
Traditional	40	35.70	72	64.30	

A significant difference was found between the groups. Far more children in the open environment feel that people care enough about them than do children in the more traditional environment.

Dimension II

The second dimension is termed the Teacher Dimension and includes seven items that asked children for specific attitudes and feelings about teachers. The referent used in each item was the term "teacher." The overall response for this dimension appears in Table 18.

Table 18

Dimension II - Teacher Dimension

Overall Responses

	Positive		Negative		
	N	%	N	%	Chi Square = 6.48
Open	798	89.1	98	10.9	Significant at .01 Level
Traditional	602	76.8	182	23.2	

The traditional group reported a positive response of 77 per cent, 12 percentage points lower than the open group.

The results demonstrate that children in an open school have a significantly more positive attitude toward their teachers.

The individual items from the Teacher Dimension are reported in Tables 19 - 25. Table 19 reports the first item asking children if their teachers told them when they are doing well.

Table 19

Dimension II- Teacher Dimension

Item 1 - Do your teachers tell you when you are doing well?

	Positive		Negative		
	N	%	N	%	Chi Square = 24.30
Open	121	92.36	10	7.63	Significant at .001 Level
Traditional	75	67.00	37	33.00	

A significant difference was found between the open group and the traditional sample. The open group was 25 percent more positive than the traditional group, a difference significant at the .001 level. It

It would seem an appropriate teaching strategy to inform children when they are doing things that are considered good. A program of rewarding positive behaviors is often considered more healthy than an approach of simply punishing negative behaviors. This item shows that an open approach is far more positive in the eyes of the children than the more traditional approach.

The second item on this dimension asked the children if the teachers showed enough interest in the things that they did in school. The results are shown in Table 20 and they support the direction indicated in the first item.

Table 20

Dimension II- Teacher Dimension

Item 2 - Do your teachers show enough interest in the things that you do in school?

	Positive		Negative		
	N	%	N	%	chi square = 10.00
Open	114	88.37	15	11.62	Significant at .01 Level
Traditional	81	72.30	31	27.70	

The traditional sample reported a positive response that was 16 per cent below that of the open group, and significant at the .01 level. Not only would a program of teachers telling children when they do well be important, but it would also seem that teachers should be interested in what the children are doing. An open school environment is characterized by higher teacher interest than the more traditional school environment. This higher interest is seen as a function of

the teachers as individuals.

The third item in the dimension simply asked the children if they liked their teachers. This item is reported in Table 21.

Table 21

Dimension II - Teacher Dimension

Item 3 - Do you like your teachers ?

	Positive		Negative		
	N	%	N	%	Chi Square = .13
Open	123	93.18	9	6.81	Not Significant
Traditional	102	91.10	10	8.90	

No significant difference was found between the open group and the traditional group. The responses were highly positive in all cases. This is an interesting result in terms of the children expressing their feelings. The traditional group felt that their teachers did not tell them enough when they were doing well, and were not as interested in what they were doing as the open school children, but both groups liked their teachers equally well. It would seem that a normal response to a feeling that teachers were neglecting you would be a negative feeling. The traditional group did not report that response. This might suggest that a feeling of not liking is not a response to being neglected, or that traditional school children did not feel free to express a negative response.

The fourth item in this dimension askedthe children if they were afraid to ask their teachers a question. These results are presented in Table 22.

Table 22

Dimension II - Teacher Dimension

Item 4 - Are you afraid to ask your teachers a Question?

	Positive		Negative		
	N	%	N	%	Chi Square = .00
Open	121	91.66	11	8.33	Not significant
Traditional	102	91.10	10	8.90	

The results were highly positive and no significant differences were found between the traditional group and the open group.

The fifth item on this dimension asked children if teachers gave them help when they needed it. The results for this item are included in Table 23. No significant differences were found between the open group and the public school group.

Table 23

Dimension II - Teacher Dimension

Item 5 - Do your teachers give you help when you need it?

	Positive		Negative		
	N	%	N	%	Chi Square = .69
Open	123	93.89	8	6.10	not significant
Traditional	101	90.20	11	9.80	

The sixth item is reported in Table 24 and asked the children if their teachers liked other children better than them.

Table 24

Dimension II - Teacher Dimension

Item 6 - Do your teachers like other children better than you?

	Positive		Negative		
	N	%	N	%	Chi Square = .80
Open	98	74.80	33	26.20	Not significant
Traditional	78	69.60	34	30.40	

No difference was found in comparing the open group to the traditional group. What is of interest in regard to this item is the relatively high number of children who think that teachers like other people better. A negative response to this item would seem to come from a rather negative self concept. Yet, almost one-third of the children made negative responses to this item.

The final item on this dimension asked children if the teachers bossed them around too much. The results appear in Table 25.

Table 25

Dimension II - Teacher Dimension

Item 7 - Do you teachers boss you around too much?

	Positive		Negative		
	N	%	N	%	
Open	115	89.14	14	10.85	Chi Square = 29.30
Traditional	66	58.9	46	41.10	Significant at .001 Level

There was a great difference between the traditional group and the open group. The difference was just over 30 per cent and significant at the .001 level. This suggests further evidence of the repression of feelings in the traditional elementary school. The traditional school children suggest that teachers do not tell them that they are doing well, that they are not interested in what they are doing, that they boss them around too much, yet the children basically like them. This seems paradoxical.

Dimension III

The third dimension is entitled the Peer Dimension, and is concerned with the children's attitudes toward other children. The referent in the items was the phrase "other children." The dimension includes seven items. The overall responses are reported in Table 26.

Table 26

Dimension III - Peer Dimension

Overall Response

	Positive		Negative		
	N	%	N	%	Chi Square = 2.59
Open	616	67.7	294	32.3	Not Significant
Traditional	476	60.7	308	39.3	

Approximately two thirds of the children in the open group had positive attitudes toward their peers. This was not significantly different from the traditional sample. The open group was more positive by 7 per cent, but this difference was not statistically significant. The overall results may suggest that children are children,

and whether or not they are in an open or non-open environment, peer attitudes are about the same. An open environment might ultimately have an impact on peer relations. It may be that two or three years into an open program would be too soon to have an impact on peer relations. The children in this study were intermediate children who have two or three years into an open program would be too soon to have an impact on peer relations. The children in this study were intermediate children who would have two or three years in an open school and three years in a non-open school. It may be that peer relations are slow to change. At any rate, the position that peer relationships might be effected by an open approach requires more investigation.

Examination of the individual items yields more information, as several of the items did show significant differences. The first item is reported in Table 27.

Table 27

Dimension III - Peer Dimension
Item 1 - Do the other children help you when you need help?

	Positive		Negative		
	N	%	N	%	
					Chi Square = 2.59
Open	79	59.40	54	40.61	Not Significant
Traditonal	55	49.10	57	50.90	

The item asked children if other children provided help when it was needed. Approximately 59 per cent of the children in the open program indicated that other children did provide help. This was almost ten per cent more than the traditional, but the difference was not statistically significant. The responses to this question is in

the right direction for an educational environment that seeks to foster cooperativeness, but the difference was not significant. Future research should show differences on this factor if peer relations are developmental as was suggested earlier.

The second item, appearing in Table 28, asked children if the other children bothered them.

Table 28

Dimension III - Peer Dimension

Item 2 - Do the other children bother you when you are doing things?

	Positive		Negative		
	N	%	N	%	Chi Square = 7.15
Open	63	48.83	66	51.15	Significant at .01 Level
Traditional	35	31.30	77	68.70	

The open group is significantly more positive than the open group. A no response is considered to be positive.

The third item asked children if other children got them into trouble when they were in school. The results for this item appear in Table 29.

Table 29

Dimension III - Peer Dimension

Item 3 - Do the other children get you into trouble at school?

	Positive		Negative		
	N	%	N	%	Chi Square = .07
Open	61	47.28	68	52.71	Not significant
Traditional	55	49.10	57	50.90	

The open group was less positive than the traditional group,

but the difference is not significant. The relatively high proportion of children who feel "bothered" should be of concern.

The fourth item was concerned with whether other children were friendly. The results appear in Table 30.

Table 30

Dimension III - Peer Dimension

Item 4 - Are the other children in school friendly toward you?

	Positive		Negative		
	N	%	N	%	Chi Square = 2.12
Open	102	78.46	28	21.53	Not Significant
Traditional	96	85.70	16	14.30	

The traditional sample was more positive on this item also. This difference was not significant.

This item, along with the result on the previous item, may well be a function of the controlled environment of the traditional school when compared to a more open environment. Most child to child interaction in a traditional school takes place under the watchful eye of a teacher, and the teacher generally plays a more authoritarian role in regard to that interaction. Anti-social behavior is prevented by the teacher. The open environment, particularly as implemented in the Quest program, allows for a great deal more peer interaction, much of which is not under the watchful eye of a teacher; and many teachers in an open setting allow for children to "work things out for themselves."

A second factor might be the broad age range present in this open school. A three year old child has the opportunity to interact with a 12 year old, and 6 year old children regularly interact with 11 and 12 year olds. This age range in children is wide, and positive peer relations may not bridge that gap. Thus, "open" children would have greater opportunity to interact with "Unfriendly" children.

Still another factor would relate back to the items that called for responses relevant to children's feelings. The open group has been shown in previous items to be an environment where feelings are much more prevalent than the traditional group. If feelings, such as unfriendliness, are recognized as natural feelings that everyone has at some time or other, the opportunity for a child to experience unfriendliness is far greater. If the proportion of children who experience unfriendliness was high, then it would suggest that children were naturally unfriendly or that an educational program fosters an unfriendly attitude. The degree of unfriendliness ranged from 16 to 22 per cent, and this might not be considered high.

The fifth item on this dimension asked children if they liked the children in their school. The results for this item appear in Table 31.

Table 31

Dimension III - Peer Dimension

Item 5 - Do you like the children in your schools?

	Positive		Negative		
	N	%	N	%	Chi Square
Open	121	93.79	8	6.20	Significant at .05 Level
Traditional	94	83.90	18	16.10	

The traditional group showed positive responses 10 per cent lower, which was significant at the .05 level. The children in the open program like each other more than the children in the traditional school, but the children in the traditional school report less incidences of unfriendliness. Again, it may suggest an open environment in which feelings are much more active and present.

The sixth item asked if children believed that other children liked them. The results are reported in Table 32 and do not seem to clarify the findings on the Peer Dimension.

Table 32

Dimension III - Peer Dimension

Item 6 - Do the children in your school like you?

	Negative		Positive		
	N	%	N	%	Chi Square = .12
Open	105	79.54	27	20.45	Not Significant
Traditional	87	77.70	25	22.30	

The traditional sample was not significantly different from the open sample. The framework that might serve to explain these results is the development of an educational program that serves to liberate the natural feelings of children. Children in a closed, traditional environment, tightly under the control of a teacher seem to be unexposed to the genuine feelings of peer relations. As they become more exposed and learn to express natural feelings they learned quite developmentally that not all people like all people. This is reflected in a decrease in those children who indicate that other children like them. This could well be children obtaining a more accurate perception of the world of feelings.

The seventh and final item on this dimension asked children if they were bossed around by other children most of the time. The results appear in Table 33.

Table 33

Dimension III - Peer Dimension

Item 7 - Most of the time do other children boss you around in school?

	Positive		Negative		
	N	%	N	%	Chi Square = 5.68
Open	83	64.34	46	39.65	Significant at .05 Level
Traditional	55	49.10	57	50.90	

The open group was 15 per cent more positive than the traditional. These results dilute the framework outlined above somewhat. If children were in a contolled environment, the expression of bossing each other around would seem to be discouraged or prevented. It may be that children are responsive to the characteristics of the environment

they go to school in. This would suggest that children in the school that have too many rules and uncaring teachers would also indirectly sanction children bossing each other around. This may be the traditional school. An environment that does not have too many rules, and has teachers that care, would set a standard of more co-operative behavior which would be reflected in the children. This may represent the open school.

The Peer Dimension is the only dimension of the first three that does not show the open approach to be significantly more positive than the traditional approach. It may be that an open environment is an educational program that allows for the natural expression of all feelings; some of these may be negative, and some of these may be positive. The peer relationship area seems to be one in which the need for more research is great.

Dimension IV

The fourth dimension consists of subject matter areas that are common to the elementary school. Each item on the dimension asked children if they liked to go to a particular subject matter area. This section reports on seven subject matter areas for which comparative data is available.

Table 34 presents the overall responses for the subject matter areas.

Table 34

Dimension IV - Comparative Subjects

Overall Responses

	Positive		Negative		
	N	%	N	%	Chi Square = 2.96
Open	693	78.6	189	21.4	Not Significant
Traditional	539	68.8	245	31.3	

The overall difference between the open program and the traditional program group was 9 per cent and it was not significant. The open group, however, was more positive towards the subject matter areas. The areas are listed individually in Tables 34 through 41.

The first item on this dimension was reading and is presented in Table 35.

Table 35

Dimension IV - Comparative Subjects

Item 1 - Reading

	Positive		Negative		
	N	%	N	%	Chi Square = 21.05
Open	98	81.66	22	18.33	Significant at .001 Level
Traditional	60	53.57	52	46.42	

Eighty-two per cent of the children in the open program liked to go to reading, which is almost 29 per cent more than the traditional group. This difference was significant at the .001 level and is among the strongest factors to differentiate the open program from the more traditional program. Children in an open environment like to

go to reading far more than children in a non-open environment.

The opposite is true for math. The complete results for item 2, math, appear in Table 36.

Table 36

Dimension IV - Comparative Subjects

Item 2 - Math

	Positive		Negative		
	N	%	N	%	Chi Square = 4.43
Open	84	68.29	39	31.70	Significant at .05 Level
Traditional	90	80.35	22	19.64	

The traditional children gave an 80 per cent positive response, 12 per cent greater than the open group. This was statistically significant at the .05 level. This is the second difference between the traditional group and the open group that is both positive in favor of the traditional school and statistically significant. The results warrant further investigation. The children in the sample were intermediate children. They took math along with reading as a basic subject, with the same teachers that had intermediate family rooms, and in most cases they experienced the same teacher for math and reading.

The first interest area or optional area to be a part of the comparative subjects was art as item 3. The results appear in Table 37.

Table 37

Dimension IV - Comparative Subjects

Item 3 - Art

	Positive		Negative		
	N	%	N	%	Chi Square = .05
Open	111	87.40	16	12.59	Not Significant
Traditional	99	88.39	13	11.60	

Again, the traditional group was more positive, but the response was not significantly different from the open group.

The fourth item was music. The results for music appear in Table 38.

Table 38

Dimension IV - Comparative Subjects

Item 4 - Music

	Positive		Negative		
	N	%	N	%	Chi Square = .78
Open	96	72.18	37	27.81	Not Significant
Traditional	75	66.96		33.03	

More children in the open group liked to go to music, but the difference was not significant.

The fifth subject was social studies and Table 39 presents the social studies results.

Table 39

Dimension IV - Comparative Studies

Item 5 - Social Studies

	Positive		Negative		
	N	%	N	%	Chi Square = 35.35
Open	112	88.18	15	11.81	Significant at .001
Traditional	60	53.57	52	46.40	

The open group children were 34 per cent more positive than the children in a traditional school. Children in an open environment have a considerably stronger liking for social studies.

The sixth item in this dimension was science. The results for science appear in Table 40.

Table 40

Dimension IV - Comparative Subjects

Item 6 - Science

	Positive		Negative		
	N	%	N	%	
Open	79	63.70	45	36.29	Chi Square = 2.87
Traditional	67	59.80	45	40.20	Not Significant

The last subject in the comparative group was gym, and the results appear in Table 41.

Table 41

Dimension IV - Comparative Subjects

Item 7 - Gym

	Positive		Negative		
	N	%	N	%	Chi Square = 2.87
Open	113	88.28	15	11.71	Not Siginficant
Traditional	90	80.30	22	19.60	

It is difficult to interpret the items on this dimension, as well as to understand how they relate to educational performance. Do children have to like a subject in order to learn it? Does a child "like" reading because of the subject or because of the teachers? Some of the subjects in this section of Dimension IV are taught by one individual, and others are taught by more than one. This would suggest that those subjects taught by more than one person should obtain a response on the nature of the subject. It does not, however, suggest that those subjects taught by one person are solely an individual effort.

A liking or not liking effect would have the strongest impact on an education program such as an open program that has significant choice. It would seem unlikely that a child who does not like a subject would choose the subject unless guidance were given, no matter what the reason for not liking it.

Discussion:

The most distinguishing feature displayed by the data is the greater positive attitudes toward school held by the children in an open program compared to children in a traditional program. Of the 41 possible comparisons to a traditional school, 19 were significantly different and positive in favor of the open environment. Sixteen were positive in favor of the open environment but not significantly different. Two responses were significantly different and positive in favor of the traditional group and four responses were positive towards the traditional group but not significant. This provides empirical support for the position that an open environment leads to positive attitudes toward school.

References

Ball, S. Assessing the Attitudes of Young Children Toward School. Princeton, New Jersey: educational Testing Service, 1971, ED 056 086.

Berk, L.E., Rose, M.H. and Stewart, D. "Attitudes of English and American Children Toward Their School Experience." Journal of Educational Psychology. 1970, Vol. 61, pp. 33-40.

Strickland, G. Development of a School Attitude Questionnaire for Young Children. UCLA Center for the Study of Evaluation, 1970, Ed 043 919.

Tuckman, B. Evaluation: Project Open Classroom. Wayne, New Jersey: 1972.

Walberg, H.J. and Thomas, S.C. Characteristics of Open Education: Toward an Operational Definition. Newton, Mass.: TDR Associates, Education Development Center, 1971.

Abstract

Empirical research on open education has been inadequate, both in quantity and in quality. The open approach to an educational environment will not be in a position to firmly establish itself as a legitimate alternative to the status quo of American education unless it can be empirically established to have a beneficial impact on children.

The present research report is drawn from an extensive evaluation of open education being conducted under the leadership of the State University College at Cortland. Specifically, data is available from the administration of the Student Attitude Questionnaire (SAQ) to children in a sample of traditional classrooms (N=112) and children in classrooms assessed as an open environment through use of the classroom observation techniques. (N=130)

The SAQ contains 40 items distributed on four dimensions: School Climate, Peer, Teacher and School Subjects. Four school subjects were not common to the two groups, thus comparitive data was available on 36 items. Children in the open classrooms showed significantly greater positive responses on the overall SAQ score (.01), School Climate (.001), and Teacher (.01). Open children were also more positive on the Peer Dimension and the Subject Dimension but this difference was not significant. The traditional school children were significantly more positive on only two of the 36 SAQ items compared.

The most distinguishing feature displayed by the data is the greater positive attitudes toward school held by the children in an open program compared to children in a traditional program. This provides empirical support suggesting that an open environment may lead to more positive attitudes toward school.